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ABSTRACT

In a study of African-American (n=119) urban high school students, coping with life stressors was positively and negatively associated with the use of substances. This study focused on how grade point average (GPA), psychological adjustment, and coping styles contribute to the reported use of substances as a way of dealing with stress. The results reveal that African-American adolescents who engage in demanding activities tend not to use substances as a way of coping with day-to-day problems. In contrast, adolescents who engage in diversion, ventilating, and avoiding behaviors as coping mechanisms tend to abuse substances. (Contains 3 tables and 13 references.) (Author/SLD)

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Running Head: Urban Adolescents

# How do GPA, Psychological adjustment and Coping Styles Contribute to the Reported use of Substance as a means of Coping with Stress?

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Abstract

In a study of African American (n=119), urban high school students, coping with life stressors were positively and negatively associated with the use of substances. This current study focused on how G.P.A., psychological adjustment, and coping styles contribute to the reported use of substances as a way of dealing with stress. The results revealed that African American adolescents who engage in demanding activities tend not to use substances as a way of coping with day to day problems. In contrast, adolescents who engage in diversion, ventilating, and avoiding behaviors tend to abuse substances.

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## Introduction

In today's society, the use and misuse of substances among adolescents have become an epidemic. There is a vast amount of research that investigates this phenomenon. For example, Johnson, Shontz, and Locke, (1984) stated that adolescence is a time where there is an increased risk of drug experimentation. This time of life is marked by challenging personal and social problems which lend itself to adolescents abusing substances. Alcohol, marijuana, and cigarettes are the three popular drugs consumed among young people. Alcohol is known to be the initial drug of choice among this group. These "gateway" drugs tend to lead to other later drug use (Ellickson, Hay, & Rand, 1992).

The use of drugs among African American adolescents is one of the most salient problems facing this group. This social ill takes on the form of cigarettes, alcohol, and other illicit drugs (Rubin, Billingsley, and Caldwell, 1994). Watts and Wright (1990) found that there was an association between alcohol and delinquency behavior among African Americans. Although researchers have investigated this phenomenon, it is limited on African American adolescent substance abuse.

There is empirical evidence that supports that African American substance abuse has not been sufficiently investigated. Research has been inadequately documented and this issue has been inappropriately addressed. Atkins, Klein, and Mosley (1987) conducted a thorough review of the literature and found two significant findings: (1) no articles appeared on alcohol related topics in three major scientific journals on African American youth; and (2) there is no body of literature on the attitudes of African American adolescents with regard to alcohol.

It is therefore apparent that research on African American adolescents substance abuse needs further investigation.

Due to the lack of research, it is very difficult to know the most effective approaches to treatment of African American adolescents. Few treatment approaches have been researched in the literature. The mainstream Disease Model is commonly employed in working with African American adolescents, but this approach may be insufficient in working with this minority population. "The disease model considers those with substance use disorders as a homogenous group and rejects the notion that there may be a subgroup of users with different maintenance factors requiring different intervention strategies or treatment goals" (Morgenstern, Frey, McCrady, Labouvie, & Neighbors, 1996).

In addition, there is a lack of clarity in the definition of the Disease Model in regards to substance abuse. The Disease Model, for the medical community, believes that biological factors are significant to alcoholism, while Alcoholics Anonymous do not succumb to this belief. Rather, they focus on spirituality and recovery of a disease that is a manifestation of an underlying disease process (Thombs, 1994).

A more effective approach may be one that is preventive in nature. Some important goals to keep in mind are (1) provide them with an awareness of social influences; (2) correct misperceptions; (3) teach them about immediate, short-term consequences; (4) teach them to seek social support from parents; (5) include a family component; and (6) provide them with positive role models (Epstein, Botvin, Diaz, & Schinke, 1995).

The researchers hypothesize that G.P.A., psychological adjustment, and coping styles will contribute to reported use of substances as a means of coping with stress. In an attempt to address this, the purpose of this proposal is to investigate the use of substances among African American adolescents. The

findings will shed light on implications for training/treatment, implications for service delivery, and implications for future research.

## Method

### Participants

Volunteers from this study included 119 African American freshman in an urban high school. The researchers had parental consent. The mean age was 16.2. There were 54 (46%) females and 65 (54%) males. The surrounding community was predominately African American and the school was located in a high-risk district for unemployment, crime, and poverty.

### Instruments

Adolescent Coping Orientation for Problem Experiences (A-Cope) (Patterson & McCubbin, 1981) is a coping inventory designed to detect the behaviors adolescents find useful in problem management and difficult situations. The normal developmental tasks of adolescents center on the search for identity, both as part of a group and as individuals, with attention focused on physical, social and psychological aspects of the self. The need to develop enough independence from one's family to discover one's separateness and uniqueness frequently creates an atmosphere of conflict in the family.

The inventory consisted of 95 items that were grouped conceptually into the following patterns for coping: ventilating feelings (expression of frustrations and tensions such as yelling , blaming others, saying mean things, and complaining to friends or family), seeking diversions (efforts to keep busy and engaged in relatively sedate activities that are a way to escape from or forgetting about the sources of tension, and stress such as sleeping, watching T.V. or reading), developing self- reliance and optimism ( directing efforts to be more organized and in charge of the situation, as well as to think positively about what

is happening to him or her), developing social support (efforts to stay emotionally connected with other people through reciprocal problem solving and expression of affect), solving family problems (use of communication with family members and following family rules to minimize conflict), seeking spiritual support (religious behaviors), investing in close friends (seeking closeness and understanding from peers), seeking professional support (getting help and advise from a professional counselor or teacher about difficult problems), engaging in demanding activity (engaging in challenging activity which allow achievement toward a goal, such as strenuous psychical activity, improving oneself, or working hard on schoolwork), being humorous (not taking the situation too seriously by joking or making light of a situation), relaxing (engaging in activities to reduce tension, such as daydreaming, listening to music, or riding around in a car), and avoiding problems (use of substances as a way to escape). Each coping pattern of style represents a subscale which has an individual score. The instrument is based on the premise that adolescents will use more than one style of coping with day to day problems.

This study, in part, is concerned with the latter. Avoiding problems includes use of substances as a way to cope with stress. This instrument takes approximately 10 minutes to complete.

Affects Balances Scale (ABS) (Derogative, 1975) is a self-reported mood scale which has its construct base rooted in the idea that healthy psychological adjustment of well-being is represented by the manifestation of positive affects or emotions, as well as the relative absence of negative emotions (Joy, Contentment, Vigor, Affection) and negative emotions (Anxiety, Depression, Guilt, Hostility). The Affect Balance Index, overall score, reflects the balance between negative and positive affects expressed in standardized scores. The smaller the score, the more negative psychological adjustment is represented.

The instrument takes approximately 3-5 minutes to complete and consists of 40 items.

Procedure

Parental consent was obtained for 150 students, however, only 119 completed packages were returned. The missing packages is attributed to absences, students' unwillingness to participate, and incomplete packages. Classrooms were randomly sampled by teachers of the basic freshman curriculum, and by hour.

Data Analysis

One multiple regression analysis was performed in order to examine the contribution of each of the 12 coping styles, as measured by A-COPE (independent variables), psychological adjustment (independent variable) as a measure by the ABS, and G.P.A. to substance abuse (dependent variable). A correlation coefficient inferential statistical measure was used to determine a relationship between A-COPE styles, psychological adjustment and substance abuse. The predetermined level of significance $p<.05$ was chosen for this study.

## Results

Table 1 shows the results of the correlation coefficient with the Affect Balance Index and the 12 coping styles as the independent variable and substance abuse as the dependent variable. The results reveal a non-significant relationship between substance abuse and psychological adjustment. The use of substances was found to be significantly influenced by the A-COPE variables. The use of relaxing as a coping style has a significantly negative relationship ($p= 042$) with the use of drugs. Avoiding problems as a coping strategy was positively (.000) associated with the use of drugs.

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Table 2 shows the results of the multiple regression with substance abuse as the dependent variable and the 12 coping styles as the independent variables. Approximately 86% (r square=86.2; p=.05) of the variance of substance abuse was found to be significantly influenced by these set of independent variables. The use of avoiding problems (p=.0000) as a coping strategy for dealing with everyday problems was found to be a significant and positive contributor to the use of substances. Demanding activities has a negative and significant (p=.02) relationship with the use of substances. Diversion as a strategy was found to have a positive and significant (p=.00) relationship to the use of substances. The findings reveal that ventilating feelings (p=.02) ,as a coping strategy, has a positive and significant relationship to the reported use of substances.

## Discussion

The researchers hypothesize that G.P.A., psychological adjustment, and coping styles will contribute to reported use of substances as a means of coping with stress. G.P.A. was found to be insignificant to reported use of substances. Having a low grade point average had no effect on reported use of drugs. The researchers thought that low G.P.A. would be significantly related to reported use of substances. If the student had low grades, they will be more stressed out and more apt to abuse drugs. However, this was not the case. It could be that since the mean G.P.A. for the entire school was below a 2.0, it is hard to determine if low G.P.A leads to substance abuse or if substance abuse leads to a low G.P.A.

Similarly, psychological adjustment was found to be insignificant to reported use of substances. It doesn't matter how positive your psychological adjustment is. What does matter, however, is how a person copes with the stressors they are faced with. For example, the students lived in a high-risk area for poverty, unemployment and crime. The question is not how psychologically

adjusted the student is to their environment, but rather how he or she copes with their current surroundings.

One important finding of the study was the determination of the coping skills employed by the students and their relationship to drug usage. Our findings support the current literature on coping styles and substance abuse. Those adolescents who have inadequate coping skills are at a risk for substance abuse (Nowinski, 1990). Those students who are engaged in demanding activities, and positive coping strategies, tend to be less likely to abuse drugs. These students are more likely to be actively working towards a goal and this consumes a great majority of their time. They, therefore, have little time to engage in substance experimentation.

Another important finding from this study is that students who use avoidance of problems as a coping strategy tend to use drugs more. It could be that they are using drugs as a way to escape the reality of their problems.

In addition, adolescents who engage in seeking diversions also are more likely to use substances. If they are constantly looking for ways to escape facing their problems, the chance that they will experiment with drugs increases.

Those adolescents who use ventilation as a coping mechanism also are more likely to abuse drugs. All their pent up frustrations are being voiced, which at first glance may seem positive. However, there is the possibility that the ventilation is not being followed through with positive reinforcement or change. To have the courage to speak your mind and have what seems like no response, can be very overwhelming, leading to use of substances. It may also be looked down upon for an adolescent to express emotions to other young people. Expression of deep rooted thoughts and feelings can be seen as a sign of weakness, whereas having control over your emotions is more acceptable.

Future research should look at the benefits of treatment approaches which contain elements of Afrocentricity. These programs may serve the adolescents better than traditional approaches. Also, it may be beneficial for researchers to create a new type of therapy that addresses sociocultural aspects, psychological/behavioral aspects, physical aspects, and spiritual aspects and see if these elements prove to be beneficial for African American adolescents (Metzger, 1988).

In terms of implications for service delivery, the researchers hold the belief that non-traditional approaches should be used in conjunction with traditional approaches when working with young African-American substance abusers. The literature on multicultural counseling states that traditional approaches do not adequately reflect the racially different minority's issues. The use of traditional approaches only poses barriers to multicultural counseling. These barriers are due to culture bound value differences and class bound value differences between the counselor and the culturally different client. (Atkinson, Morten, and Sue, 1989). Counselors who are aware of their client's cultural expressions are perceived as an expert and more trustworthy (Atkinson, Morten, and Sue, 1993). Treatment programs should address both substance related and cultural related issues when working with African American adolescents (Atkins et al. 1987). Non-traditional approaches such as music, art, food, and videos may be more effective for this young population.

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Table 1
Correlation Between Substance Abuse and Coping Styles

| | Substance Abuse | |
|---|---|---|
| Abiindex | r=.0410 | p=.673 |
| Avoidpro | r=.5190 | p=.00 |
| Demandin | r=.1739 | p=.058 |
| Diversio | r=.1434 | p=.118 |
| Humor | r=-.0743 | p=.420 |
| Infriend | r=-.0195 | p=.833 |
| Prosuppo | r=.0686 | p=.456 |
| Relaxing | r=-.1862 | p=.042 |
| Selfreli | r=.0384 | p=.677 |
| Socisupp | r=.0942 | p=.306 |
| Solvfami | r=.1765 | p=.054 |
| Spirisup | r=.1220 | p=.185 |
| Ventilat | r=.0675 | p=.464 |

Table 2
Results of the Multiple Regression with Substance Abuse as Dependent Variable.

| | |
|---|---|
| Multiple R | .92886 |
| R Square | .86278 |
| Standard Error | 1. 41197 |

| Analysis of Variance | DF | Sum of Squares | Mean Square | F | p |
|---|---|---|---|---|---|
| Regression | 15 | 589.15569 | 39.27705 | 19.70109 | .05 |

Significant Variables in the Equation

| Variable | B | SE B | Beta | T | Sig T |
|---|---|---|---|---|---|
| Avoidpro | .764360 | .067181 | .847295* | 11.378 | .0000 |
| Demandin | -.156061 | .067235 | -.173797* | -2.321 | .0247 |
| Diversio | .304814 | .053043 | .498530* | 5.746 | .0000 |
| Ventilat | .149074 | .062834 | .153680* | 2.372 | .0218 |
| Abiindex | -.037671 | .272551 | -.009540 | -.138 | .8907 |
| Humor | -.164214 | .1183121 | -.103119 | -1.388 | .1717 |
| Infriend | .013810 | .121320 | .008568 | .114 | .9099 |
| Prosuppo | -.179030 | .154904 | -.082213 | -1.156 | .2536 |
| Relaxing | .016497 | .102812 | .012200 | .160 | .8732 |
| Selfreli | -.069510 | .050951 | -.100581 | -1.364 | .1790 |
| Socisupp | -.045876 | .057366 | -.056366 | -.800 | .4279 |
| Solvfami | -.004970 | .0556231 | -.006458 | -.089 | .9292 |
| Spirisup | -.032907 | .097292 | -.023399 | -.338 | .7367 |
| Avergpa | .108733 | .306947 | .031237 | .354 | .7247 |
| Totabsen | -.004902 | .014014 | -.037651 | -.350 | .7280 |
| (Constant) | -3.727696 | 2.513035 | | -1.483 | .1447 |

Note: All requested variables entered; * indicates significant variables

Table 3

Definition and Explanation of Significant Variables

| | |
|---|---|
| *Avoiding Problems: | Use of substances as a way to escape everyday stressors. |
| Engaging in Demanding Activity: | Engaging in challenging activity which allow achievement toward a goal, such as strenuous physical activity, improving oneself, or working hard on schoolwork. |
| *Seeking Diversions: | Efforts to keep busy and engaged in relatively sedate activities that are a way t escape from or forgetting about the sources of tension and stress, such as sleeping, watching T.V. or reading. |
| *Ventilating Feelings: | Expression of frustrations and tensions such as yelling, blaming others, saying mean things, and complaining to friends or family. |

Note: * indicates variables that are positively correlated to reported use of substances

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